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EXAMINER				
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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

Notice of the Office communication was sent electronically on above-indicated "Notification Date" to the following e-mail address(es):

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Office Action Summary

Application No.

10/520,490

Applicant(s)

SPALINK ET AL.

Examiner

STEVEN C. NGUYEN

Art Unit

2443

Period for Reply -- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 30 March 2010.
- 2a) ☒ This action is **FINAL**. 2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-10, 12-24 and 26-30 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-10, 12-24, 26-30 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
 2. ☐ Certified copies of the priority documents have been received in Application No. _____.
 3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

* See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO/SB-08)
Paper No(s)/Mail Date _____
- 4) ☐ Interview Summary (PTO-413)
Paper No(s)/Mail Date _____
- 5) ☐ Notice of Informal Patent Application
- 6) ☐ Other: _____

DETAILED ACTION

1. This action is responsive to the amendment and remarks filed on 03/30/2010.
2. **Claims 1-10, 12-24, 26-30** are pending in this application.
3. **Claims 1, 13, 21, 24, 26** have been amended.
4. **Claims 11, 25** have been previously cancelled.
5. **Claims 29-30** have been added.

Claim Rejections - 35 USC § 101

35 U.S.C. 101 reads as follows:

Whoever invents or discovers any new and useful process, machine, manufacture, or composition of matter, or any new and useful improvement thereof, may obtain a patent therefor, subject to the conditions and requirements of this title.

6. **Claim 24** is rejected under 35 USC 101 since the claims are directed to non-statutory subject matter. Claim 24 recites a "tangible computer readable storage medium" which appear to cover both transitory and non-transitory embodiments. The United States Patent and Trademark Office (USPTO) is required to give claims their broadest reasonable interpretation consistent with the specification during proceedings before the USPTO. *See In re Zletz*, 893 F.2d 319 (Fed. Cir. 1989) (during patent examination the pending claims must be interpreted as broadly as their terms reasonably allow). The broadest reasonable interpretation of a claim drawn to a computer readable medium (also called machine readable medium and other such variations) typically covers forms of non-transitory tangible media **and** transitory propagating signals *per se* in view of the ordinary and customary meaning of computer

readable media, particularly when the specification is silent. *See* MPEP 2111.01.

When the broadest reasonable interpretation of a claim covers a signal *per se*, the claim **must** be rejected under 35 U.S.C. § 101 as covering non-statutory subject matter. *See In re Nuijten*, 500 F.3d 1346, 1356-57 (Fed. Cir. 2007) (transitory embodiments are not directed to statutory subject matter) and *Interim Examination Instructions for Evaluating Subject Matter Eligibility Under 35 U.S.C. § 101*, Aug. 24, 2009; p. 2.

The Examiner suggests that the Applicant add the limitation "non-transitory" to the "tangible computer readable storage medium" as recited in the claim(s) in order to properly render the claim(s) in statutory form in view of their broadest reasonable interpretation in light of the originally filed specification. The Examiner also suggests that the specification may be amended to add the term "non-transitory" to the disclosed "tangible computer readable storage medium" to avoid a potential objection to the specification for a lack of antecedent basis of the claimed terminology.

Claim Rejections - 35 USC § 103

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

10. Claims 1-6, 12-18, 21-24, 26-28 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graf et al (US 7,584,293) in view of Khun-Jush (NPL, Hiperlan 2 for

FWA Below 11 GHz) and Gaedke et al (US 2003/0152100), hereinafter Graf, Jush, and Gaedke.

11. Regarding Claims 1, 21, 24 Graf disclosed:

- a. a network device for a device network, comprising *(abstract)*;
- b. to pass said external traffic, in dependence of the detected content type, to a content specific convergence layer adapted to handle the respective content type *(Column 5, Lines 33-55 state that digital information is transported from on mobile terminal to another. There is a Service Specific Convergence Sublayer that distinguishes between voice, voiceband data, and circuit mode data. There are many different SSCSs that support specific AAL2 user services or groups of services)*;
- c. a content specific convergence layer adapted to exchange network traffic with other network devices of said device network via content specific connections, wherein said content specific connections are adapted to the requirements of the respective content type *(Column 5, Lines 33-55 state that digital information is transported from on mobile terminal to another. There is a Service Specific Convergence Sublayer that distinguishes between voice, voiceband data, and circuit mode data. There are many different SSCSs that support specific AAL2 user services or groups of services. The encoding/decoding rate of information content can vary dependent upon the content. For example, voiceband data traffic may require an increase in the rate of operation of the codecs from a nominal to a higher rate in order to accommodate the data)*;

d. wherein the content specific convergence layer includes a common part (*Column 5, Lines 33-47 state that there is a Common Part Sublayer along with the SSCS*);

Graf did not explicitly disclose:

e. a content detection layer adapted to detect the content type of external traffic received by said network device;

f. at least two content specific convergence layers include a common part, the common part being common to the at least two content specific convergence layers;

g. the common part being adapted to segment a data packet of said external traffic into a plurality of corresponding data packets in accordance with an internal protocol of the device network and for each of said at least two content specific convergence layer;

h. the common part being further adapted to reassemble data packets according to said internal protocol of the device network and for each of said at least two content specific convergence layer into corresponding data packets of a receiving external traffic.

However, Jush disclosed:

i. a content detection layer adapted to detect the content type of external traffic received by said network device (*Page 6 shows that the service specific part of the convergence layer can indicate whether the content is UMTS, PPP, Firewire, or Ethernet traffic*);

j. at least two content specific convergence layers (*Page 6 states that there are multiple convergence layers*);

k. the common part being adapted to segment a data packet of said external traffic into a plurality of corresponding data packets in accordance with an internal protocol of the device network and for each of said at least two content specific convergence layer (*Page 6 states that there is mapping between higher layer connections/priorities and DLC connections/priorities and that there is segmentation and reassembly of the data packet*);

l. the common part being further adapted to reassemble data packets according to said internal protocol of the device network and for each of said at least two content specific convergence layer into corresponding data packets of a receiving external traffic (*Page 6 states that there is mapping between higher layer connections/priorities and DLC connections/priorities and that there is segmentation and reassembly of the data packet*).

m. The utilization of the readily available content detection layer, multiple convergence layers, and common part that segments and reassembles packets of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the

invention, for example, to accommodate content that needs certain quality of service characteristics.

Gaedke disclosed:

n. the common part being common to the at least two content specific convergence layers (*Paragraphs 35-36 state that the convergence layers comprise parts that are common to all HiperLAN2 devices which is the common part convergence sub layer and the segmentation and Re-assembly part*).

o. The utilization of the readily available common part being common to at least two content specific convergence layers of Gaedke would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to follow a typical HiperLAN2 structure.

12. Regarding Claim 2, the limitations of Claim 1 have been addressed. Graf disclosed:

a. wherein one of said content types is real time critical data, and said content specific convergence layer include a convergence layer adapted to handle real time critical data (*Column 5, Lines 48-55 state that upon detection of voiceband data traffic, an increase to the rate of operation of the codec from a nominal to a higher rate is performed*).

Graf did not explicitly disclose:

- b. at least two content specific convergence layers.

However, Jush disclosed:

- c. at least two content specific convergence layers (*Page 6 states that there are multiple convergence layers*).

- d. The utilization of the readily available multiple convergence layers of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to accommodate content that needs differing quality of service characteristics.

13. Regarding Claim 3, the limitations of Claim 1 have been addressed. Graf disclosed:

- a. wherein one of said content types is packet based data, wherein the content specific convergence layer include a convergence layer adapted to handle packet based data (*Column 5, Lines 48-55 state that if facsimile data is detected, the codecs may be further altered*).

Graf did not explicitly disclose:

- b. at least two content specific convergence layers.

However, Jush disclosed:

c. at least two content specific convergence layers (*Page 6 states that there are multiple convergence layers*).

d. The utilization of the readily available multiple convergence layers of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to accommodate content that needs differing quality.

14. Regarding Claim 4, the limitations of Claim 1 have been addressed. Graf disclosed:

a. wherein said external traffic is at least one of Ethernet traffic, IEEE 1394 traffic, UMTS traffic, or PPP traffic (*Column 4, Lines 55-60 state that the UMTS radio access networks are used*).

15. Regarding Claim 5, the limitations of Claim 1 have been addressed. Graf disclosed:

a. wherein said network device includes hardware connectivity for at least one of Ethernet traffic, IEEE 1394 traffic, UMTS traffic, or PPP traffic (*Column 4, Lines 55-60 state that the UMTS radio access networks are used. As the UMTS network is used, there must be hardware connectivity involved*).

16. Regarding Claim 6, the limitations of Claim 1 have been addressed. Graf disclosed:

a. wherein said network device is an access point of said device network (*Column 4, Lines 60-65 states that the core network acts to transport information between telecommunications nodes or endpoints forming part of or in communication with any other network*).

17. Regarding Claim 12, the limitations of Claim 1 have been addressed. Graf did not explicitly disclose:

a. wherein said content specific convergence layers are operable to be used simultaneously within the same device network.

However, Jush disclosed:

b. wherein said content specific convergence layers are operable to be used simultaneously within the same device network (*Page 20 states that there are multiple active convergence layers since each one deals with a different type of fixed network support*).

c. The utilization of the readily available convergence layers being used simultaneously of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to be able to process data at a quicker rate.

18. Regarding Claim 13, the claim is substantially similar to Claim 1 and is therefore rejected under the same rationale. Claim 13 does however mention a second network

device that includes the same parts as the first network device. Gaedke discloses that there are two devices on the network that include parts common to all HiperLAN2 devices (*Paragraphs 35-36*).

19. Regarding Claim 14, the limitations of Claim 13 have been addressed. Graf did not explicitly disclose:

a. wherein the at least two content specific convergence layers and the at least two further content specific convergence layers are adapted to set up and release content specific connections between the first and second network devices of said device network, with a content specific connection being set up between one of said at least two content specific convergence layers of said first network device which supports a certain content type, and the respective content specific convergence layer of said second network device which supports the same content type.

However, Jush disclosed:

b. wherein the at least two content specific convergence layers and the at least two further content specific convergence layers are adapted to set up and release content specific connections between the first and second network devices of said device network, with a content specific connection being set up between one of said at least two content specific convergence layers of said first network device which supports a certain content type, and the respective content specific convergence layer of said second network device which supports the same content type (*Page 12 states that connection handling is performed and that the setup/release of DLC connections is performed*)

c. The utilization of the readily available setting up and releasing content specific connections of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to not waste bandwidth by leaving dormant connections open.

20. Regarding Claim 15, the limitations of Claim 13 have been addressed. Graf did not explicitly disclose:

a. wherein the external traffic exchanged with said content specific convergence layer of said first network device is of a different kind than the further external traffic exchanged with said content specific convergence layer of said second network device.

However, Jush disclosed:

b. wherein the external traffic exchanged with said content specific convergence layer of said first network device is of a different kind than the further external traffic exchanged with said content specific convergence layer of said second network device (*Page 20 states that there are multiple convergence layers active each dealing with a different network such as IEEE 1394 and Ethernet*).

c. The utilization of the readily available exchanging different kinds of traffic of Jush would have been obvious to one of ordinary skill in the art in view of the

teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to allow multiple devices to be compatible with each other.

21. Regarding Claim 16, the limitations of Claim 13 have been addressed. Graf disclosed:

a. wherein the at least two content specific convergence layers and the at least two further content specific convergence layers are adapted to reserve a fixed bandwidth for said content specific connection in case said content specific connection is for a content type which requires a quality of service feature (*Column 5, Lines 48-55 state that depending upon the content type, the rate of the information can be changed higher or lower*).

22. Regarding Claim 17, the limitations of Claim 13 have been addressed. Graf did not explicitly disclose:

a. wherein the at least two content specific convergence layers and the at least two further content specific convergence layers are adapted to register for each content specific connection, the content type supported by said content specific connection.

However, Jush disclosed:

b. wherein the at least two content specific convergence layers and the at least two further content specific convergence layers are adapted to register for

each content specific connection, the content type supported by said content specific connection (*Page 20 states that each convergence layer is fixed to a type of network, therefore only data that is in the correct network path would be sent*).

c. The utilization of the readily available registering for each content specific connection of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to differentiate between content specific connections.

23. Regarding Claim 18, the limitations of Claim 13 have been addressed. Graf disclosed:

a. wherein said device network is a wireless local area network (WLAN) or a HiperLAN/2 network (*Column 3, Lines 41-49 state that the mobile terminals use an air interface, or WLAN*).

24. Regarding Claim 22, the limitations of Claim 21 have been addressed. Graf did not explicitly disclose:

a. setting up the content specific connections between said first and second network devices before transmitting said network traffic between said first and second network devices in accordance with said content type.

However, Jush disclosed:

b. setting up the content specific connections between said first and second network devices before transmitting said network traffic between said first and second network devices in accordance with said content type (*Page 12 states that there is a setup and release of connections*).

c. The utilization of the readily available setting up and releasing content specific connections of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to not waste bandwidth by leaving dormant connections open.

25. Regarding Claim 23, the limitations of Claim 21 have been addressed. Graf did not explicitly disclose:

a. releasing after the network traffic between said first and second network devices has been transmitted in accordance with said content type, said content specific connection between said two network devices is released.

However, Jush disclosed:

b. releasing after the network traffic between said first and second network devices has been transmitted in accordance with said content type, said content specific connection between said two network devices is released (*Page 12 states that there is a setup and release of connections*).

c. The utilization of the readily available setting up and releasing content specific connections of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to not waste bandwidth by leaving dormant connections open.

26. Regarding Claim 26, the limitations of Claim 1 have been addressed. Graf disclosed:

a. a convergence layer including drivers that are adapted to receive and send data (*Column 5, Lines 33-55 state that the convergence layer is able to send and receive data. Therefore, there must be drivers*);

Graf did not explicitly disclose:

b. according to different external network protocols, respectively.

However, Jush disclosed:

c. according to different external network protocols, respectively (*Page 20 states that the data can be IEEE 1394 or Ethernet, for example*).

d. The utilization of the readily available different external network protocols of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with

no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to allow compatibility with different networks.

27. Regarding Claim 27, the limitations of Claim 1 have been addressed. Graf disclosed:

a. wherein the common part is further adapted to detect a protocol type of the receiving external traffic and to forward the data to the respective target device (*Column 5, Lines 33-55 state that content type is detected whether it is voiceband data traffic, voice, or circuit mode data. According to the type, the content is sent to a mobile terminal*).

28. Regarding Claim 28, the limitations of Claim 13 have been addressed. Graf did not explicitly disclose:

a. wherein the network is an ad hoc network.

However, Jush disclosed:

b. wherein the network is an ad hoc network (*Page 12 states that peer to peer ad hoc is used*).

c. The utilization of the readily available ad hoc network of Jush would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than

predictable results to one of ordinary skill in the art at the time of the invention, for example, to allow users to communicate directly with each other.

Regarding Claim 29, the limitations of Claim 1 have been addressed. Graf did not explicitly disclose:

a. wherein the content detection layer and the convergence layers are disposed in a protocol stack, the protocol stack comprising physical layers, data link control layers, and convergence layers, wherein the convergence layers comprise the content detection layer and the at least two content specific convergence layers, the at least two content specific convergence layers being disposed between the content detection layer and the data link control layer.

However, Gaedke disclosed:

b. wherein the content detection layer and the convergence layers are disposed in a protocol stack, the protocol stack comprising physical layers, data link control layers, and convergence layers, wherein the convergence layers comprise the content detection layer and the at least two content specific convergence layers, the at least two content specific convergence layers being disposed between the content detection layer and the data link control layer (*Figure 2 shows that the convergence layer is disposed in a protocol stack that comprises a physical layer, and a data link control layer. The service specific sub layer and common part sub layer are also included in the protocol stack*);

c. The utilization of the readily available protocol stack of Gaedke would have been obvious to one of ordinary skill in the art in view of the teachings of

Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007). The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to follow a typical HiperLAN2 structure.

Regarding Claim 30, the limitations of Claim 29 have been addressed. Graf did not explicitly disclose:

a. wherein the at least two content specific convergence layers are disposed at the same height in the protocol stack.

However, Gaedke disclosed;

b. wherein the at least two content specific convergence layers are disposed at the same height in the protocol stack (*Figure 2, the service specific convergence sub layer is above the data link control layer at the same height*).

c. The utilization of the readily available protocol stack of Gaedke would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. *KSR Int'l Co. v. Teleflex, Inc.*, 550 U.S. 398 (2007). The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to follow a typical HiperLAN2 structure.

29. Claims 7, 8 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graf in view of Jush, Gaedke, and Kisor.

30. Regarding Claim 7, the limitations of Claim 4 have been addressed. Graf disclosed:

a. content detection layer is adapted to analyze if traffic is real time critical traffic, and is adapted to pass said traffic if traffic is real time critical, to a convergence layer adapted to handle real time critical data (*Column 5, Lines 48-55 state that upon detection of voiceband data traffic, an increase to the rate of operation of the codec from a nominal to a higher rate is performed*).

Graf did not explicitly disclose:

b. that said traffic is Ethernet traffic.

However, Kisor disclosed:

c. that said traffic is Ethernet traffic (*Column 2, Lines 39-40, 59-67 and Column 3, Lines 1-3 state that there is an Ethernet adapter that handles all Ethernet traffic. Once received, the communication path scheduler sends data that it receives to LAN [Ethernet] device if it is Ethernet data*).

d. The utilization of the readily available Ethernet traffic of Kisor would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for

example, to keep the integrity of the data by knowing what kind of traffic is being transmitted.

31. Regarding Claim 8, the limitations of Claim 4 have been addressed. Graf disclosed:

a. wherein said content detection layer is adapted to analyze if traffic is not real time critical traffic, and is adapted to pass said traffic, in case said traffic is not real time critical, to a convergence layer adapted to handle packet based data (*Column 5, Lines 48-55 state that if facsimile data is detected, the codecs may be further altered*).

However, Graf did not explicitly disclose:

b. that said traffic is Ethernet traffic

However, Kisor disclosed:

c. that said traffic is Ethernet traffic (*as discussed above in Claim 7*).

d. The utilization of the readily available Ethernet traffic of Kisor would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to keep the integrity of the data by knowing what kind of traffic is being transmitted.

32. Claims 9, 10 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graf in view of Jush, Gaedke, and Fant.

33. Regarding Claim 9, the limitations of Claim 4 have been addressed. Graf disclosed:

a. wherein said content detection layer is adapted to analyze if said traffic is packet based data traffic, and is adapted to pass said traffic, in case said traffic is real time critical data traffic, to a convergence layer adapted to handle real time critical data (*Column 5, Lines 48-55 state that upon detection of voiceband data traffic, an increase to the rate of operation of the codec from a nominal to a higher rate is performed*).

Graf did not explicitly disclose:

b. that said traffic is IEEE 1394 traffic.

However, Fant disclosed:

c. that said traffic is IEEE 1394 traffic (*Column 3, Lines 32-34 state that there is a network interface that handles IEEE 1394 data packets*).

d. The utilization of the readily available IEEE 1394t traffic of Fant would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than

predictable results to one of ordinary skill in the art at the time of the invention, for example, to enable a higher transmission rate by using IEEE 1394 with a lower cost (*Fant, Column 3, Lines 32-34*).

34. Regarding Claim 10, the limitations of Claim 4 have been addressed. Graf disclosed:

a. wherein said content detection layer is adapted to analyze if said traffic is real time critical data traffic, and is adapted to pass said traffic, in case said traffic is real time critical data traffic, to a convergence layer adapted to handle real time critical data (*Column 5, Lines 48-55 state that upon detection of voiceband data traffic, an increase to the rate of operation of the codec from a nominal to a higher rate is performed*).

Graf did not explicitly disclose:

b. that said traffic is IEEE 1394 traffic.

However, Fant disclosed:

c. that said traffic is IEEE 1394 traffic (*Column 3, Lines 32-34 state that there is a network interface that handles IEEE 1394 data packets*).

d. The utilization of the readily available IEEE 1394t traffic of Fant would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for

example, to enable a higher transmission rate by using IEEE 1394 with a lower cost (*Fant, Column 3, Lines 32-34*).

35. Claims 19, 20 are rejected under 35 U.S.C. 103(a) as being unpatentable over Graf in view of Jush, Gaedke, and Lappetelainen.

36. Regarding Claim 19, the limitations of Claim 13 have been addressed. Graf disclosed:

a. wherein the device network is adapted to exchange control messages and data packets between said first and second network device (*Column 7, Lines 28-36 state that rate control messages are sent and are mapped to a RTCP packet*).

Graf did not explicitly disclose:

b. that the exchange of data is according to a TDMA scheme.

However, Lappetelainen disclosed:

c. that the exchange of data is according to a TDMA scheme (*Column 2, Lines 18-29 state that a HiperLAN/2 system is based on TDMA*).

d. The utilization of the readily available TDMA scheme of Lappetelainen would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the

invention, for example, to enable each stream to have a dedicated time slot for transmission.

37. Regarding Claim 20, the limitations of Claim 19 have been addressed. Graf did not explicitly disclose:

a. wherein the device network is adapted to reserve a set of time slots of said TDMA transmission scheme for a certain content specific connection.

However, Lappetelainen did disclose:

b. wherein the device network is adapted to reserve a set of time slots of said TDMA transmission scheme for a certain content specific connection (*Column 2, Lines 18-29 state that each connection is allocated a separate time slot wherein data is transmitted*).

c. The utilization of the readily available TDMA scheme of Lappetelainen would have been obvious to one of ordinary skill in the art in view of the teachings of Graf since all the claimed elements were known in the prior art and one skilled in the art could have combined the elements as claimed by known methods with no change in their respective functions. The combination would have yielded nothing more than predictable results to one of ordinary skill in the art at the time of the invention, for example, to allow critical data the ability to have a strong connection for the time slot allotted to it.

Response to Arguments

38. Applicant's arguments with respect to **Claims 1-10, 12-24, 26-30** have been considered but are moot in view of the new ground(s) of rejection.

Conclusion

Applicant's amendment necessitated the new ground(s) of rejection presented in this Office action. Accordingly, **THIS ACTION IS MADE FINAL**. See MPEP § 706.07(a). Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed, and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the date of this final action.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to STEVEN C. NGUYEN whose telephone number is

(571)270-5663. The examiner can normally be reached on Monday through Thursday with alternating Friday 7:30AM - 5:00PM, EST.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Tonia Dollinger can be reached on (571) 272-4170. The fax phone number for the organization where this application or proceeding is assigned is 571-273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

/S.C.N./
Examiner, Art Unit 2443
07/01/2010

/George C Neurauter, Jr./
Primary Examiner, Art Unit 2443